REMARKS

Entry of the foregoing and further and favorable reconsideration of the subject application, in light of the following remarks and pursuant to 37 C.F.R. § 1.116, are respectfully requested.

Rejections Under 35 U.S.C. § 251

Claims 1-29, 31-32 and 34-138 have been rejected under 35 U.S.C. § 251 for purportedly being based upon a defective reissue declaration. Applicants herewith submit a new reissue declaration. In light of this submission, withdrawal of this rejection of claims 1-29, 31-32 and 34-138 is believed to be in order.

Claims 19-29, 31-32, 34-44 and 62-138 have been rejected under 35 U.S.C. § 251 for allegedly being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. For at least the reasons set forth below, withdrawal of this rejection is believed to be in order.

Pending claims 19-20 are directed to plant parts having an altered phenotype as result of transcription of a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is preferentially regulated in a embryonic seed tissue. Pending claims 21-24 are directed to DNA constructs comprising, amongst other components, a promoter region obtainable from a gene that is preferentially regulated in a embryonic seed tissue. Claims 25-29 are directed to plant cells and plants comprising a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is preferentially regulated in a embryonic seed tissue. Claims 81-130 and 136-138 are directed to methods for obtaining a plant having a regulatable phenotype; methods for altering the phenotype of a plant tissue of interest; methods for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest; methods for modifying transcription in plant tissue of interest; and methods of selectively expressing a heterologous DNA sequence of interest in a plant tissue of interest, comprising transforming a plant cell with a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is preferentially regulated in a embryonic seed tissue. These claims are narrower than the claims cancelled in U.S. Appl. Ser. No. 08/105,852 because the DNA constructs used in these methods and present in the claimed

plant parts comprise a promoter region from a gene that is preferentially regulated in a embryonic seed tissue. The claims of the '852 application were broader because they recited that the promoter region of the gene in the constructs was regulated in a specific plant tissue. As noted in *In re Clement*, 131 F.3d, 1464, 1470, 45 USPQ2d 1161, 1165 (Fed. Cir. 1997), "...if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim..." With respect to the above claims, there is no recapture since the claims are narrower in an aspect germane to a rejection of the claims in the parent application.

Claims 131 is directed to a cell of a dicotyledonous plant having integrated into its genome a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is light-inducible in a plant chloroplast containing tissue. Claim 132 is directed to a cell of a dicotyledonous plant having an altered phenotype as a result of expression of a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is light inducible in plant chloroplast containing tissue. Of the claims cancelled or amended in the '852 application, the claim most similar to pending claims 131 and 132 is claim 10. However, pending claims 131 and 132 are narrower than claim 10 of the '852 application in that the promoter region is obtainable from a gene that is light-inducible in a plant chloroplast containing tissue. Furthermore, with respect to claim 132, the DNA sequence of interest provides for at least one characteristic selected from the group consisting of increased capability of protein storage, improved nutrient source, enhanced response to light, enhanced dehydration resistance, and enhanced resistance to viruses, insects of fungi. Thus, claims 131 and 132 are narrower that the claims cancelled or amended in the '852 application in an aspect germane to a rejection of the claims in the '852 application, and therefore recapture does not exist.

Claim 133 is directed to a method for altering the phenotype of a dicotyledonous plant tissue of interest comprising growing a dicotyledonous plant comprising cells containing a DNA construct comprising, amongst other components, a promoter region obtainable from a gene that is light inducible in plant chloroplast containing tissue. None of the claims cancelled or amended in the '852 application relate to a method for altering the phenotype of a dicotyledonous plant tissue of interest. The closest claim in the '852 application would be claim 93, which recited a method for introducing DNA into dicotyledonous plant cells, but makes no mention of altered

phenotype. Therefore, with respect to claim 133, no recapture exists since the subject matter claimed was not cancelled to obtain allowance in the parent '852 application.

Claims 65-80 and 134-135 are directed to methods for obtaining a plant having a regulatable phenotype; methods for altering the phenotype of a plant tissue of interest; methods for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest; methods for modifying transcription in plant tissue of interest; and methods to selectively express a heterologous DNA sequence of interest in a plant tissue of interest comprising transforming a host plant cell with a DNA construct comprising, amongst other components, a promoter region obtainable from a gene preferentially associated with a specific stage of plant growth. Again, none of the claims cancelled or amended in the '852 application relate to these methods, and therefore, with respect to claims 65-80 and 134-135, no recapture exists since the subject matter claimed was not cancelled to obtain allowance in the parent '852 application.

In light of the above, withdrawal of these rejections under 35 U.S.C. § 251, is believed to be in order.

Double Patenting Rejections

Applicants reaffirm their intent to file terminal disclaimers in response to each of the double patenting rejections upon indication of allowable subject matter.

Rejection of Claims 101-108, 129-130, 134 and 138 Under 35 U.S.C. § 112, Second Paragraph

Claims 101-108, 129-130, 134 and 138 have been rejected under 35 U.S.C. § 112, second paragraph, for purportedly being indefinite. The claims have been amended to clarify the subject matter claimed. The amendments to the claims do not limit the scope of the claims. In view of these amendments to the claims, applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 112, second paragraph.

Rejection of Claims 19-29, 62-130 and 133-138 Under 35 U.S.C. § 112, First Paragraph

Claims 19-29, 62-130 and 133-138 have been rejected under 35 U.S.C. §112, first paragraph, for purportedly not being enabled for the scope of the claimed invention. For at least all of the reasons set forth below, withdrawal of this rejection is believed to be in order.

Initially, it is noted that these claims have been amended, in order to expedite prosecution, to recite that the promoter or transcription initiation region is from a gene preferentially expressed in seed embryonic tissue. Promoter and transcription initiation regions of genes preferentially expressed in seed embryonic tissue were isolated prior to the priority date of the pending application. See, for example, in the specification at column 17, line 15, to column 25, line 41 (wherein a construct is disclosed comprising the napin promoter (napin is a gene preferentially expressed in seed embryonic tissue) and spinach ACP) of USP 5,753,475, for which re-issue is sought. Or, at the very least, the specification discloses how one of skill in the art could isolate promoters from genes preferentially expressed in seed embryonic tissue without undue experimentation. See column 7, line 66, to column 8, line 9 (wherein transcription initiation regions for various genes preferentially expressed in seed embryonic tissue is disclosed); and column 30, line 64, to column 31, line 14 (wherein the identification of promoter regions from genes preferentially expressed in seed embryonic tissue is disclosed), of the '475 patent. In addition, Murai *et al.*, *Science 222*:476-482 (1983), discloses the promoter regions of β-phaseolin, a protein preferentially expressed in the seed embryo tissue of bean seed. Since promoters for genes preferentially expressed in seed embryonic tissue were well known to one of skill in the art at the time the application was filed (or capable of being isolated by one of skill in the art without undue experimentation) the production of constructs comprising such promoters would be within the skill of one in the art at the time the application was filed (as the production of constructs for gene expression was widely known at that time).

The enablement requirement is met if the description enables any mode of making and using the claimed invention. *Engel Industries, Inc. v. Lockformer Co.*, 946 F.2d 1528, 20 USPQ2d 1300 (Fed. Cir. 1991); and *The Johns Hopkins University v. CellPro, Inc.*, 152 F.2d 1342, 47 U.S.P.Q.2d 1705 (CAFC 1998). The specification does enable the production of constructs comprising, as operably linked components in the direction of transcription, a

promoter region obtainable from a gene preferentially regulated in embryonic seed tissue (see above); a DNA sequence of interest, other than the native coding sequence of said gene, that provides for expression or modulation of endogenous products; and a transcription termination region. Therefore, the enablement requirement has been met.

In light of these remarks, Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 112, first paragraph.

Rejection of Claims 19-29, 62-130 and 133-138 Under 35 U.S.C. § 112, First Paragraph

Claims 19-29, 62-130 and 133-138 have been rejected under 35 U.S.C. § 112, first paragraph, for purportedly containing subject matter not described in the specification in such a way as to reasonably convey to one of skill in the art that the inventors had possession of the claimed invention at the time the application was filed. For at least all of the reasons set forth below, withdrawal of this rejection under 35 U.S.C. § 112, first paragraph, is believed to be in order.

As noted above, these claims have been amended, to expedite prosecution, to recite that the promoter or transcription initiation region is from a gene preferentially expressed in seed embryonic tissue. Support for constructs, and methods of using constructs for seed embryonic tissue specific expression, may be found in the specification at column 7, line 66, to column 8, line 9 (wherein transcription initiation regions for various genes preferentially expressed in seed embryonic tissue is disclosed); column 17, line 15, to column 25, line 41 (wherein a construct is disclosed comprising the napin promoter (napin is a gene preferentially expressed in seed embryonic tissue) and spinach ACP); and at column 30, line 64, to column 31, line 14 (wherein the identification of promoter regions from genes preferentially expressed in seed embryonic tissue is disclosed), of USP 5,753,475, for which re-issue is sought. Also, as noted above, promoter or transcription initiation regions from genes preferentially expressed in seed embryonic tissue were well known to one of skill in the art at the time the application to which the pending application claims priority was filed.

Moreover, "[i]f a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing, even if [not] every nuance

of the claims is explicitly described in the specification, then the adequate written description requirement is met." *In re Alton*, 76 F.3d. 1168, 37 USPQ2d 1578 (Fed. Cir. 1996). Therefore, it is not necessary that every seed embryonic tissue specific promoter that could be used in the constructs of the claimed invention be disclosed, because one of skill in the art would have understood the inventor to be in possession of constructs comprising a promoter from a gene preferentially expressed in seed embryonic tissue (including those not specifically disclosed).

Applicants have satisfied the written description requirement by describing the claimed invention in sufficient detail that one of skill in the art would reasonably conclude that the inventor had possession of the invention. In light of this, withdrawal of this rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Rejection of Claims 129-130 and 138 Under 35 U.S.C. § 112, First Paragraph

Claims 129-130 and 138 have been rejected under 35 U.S.C. § 112, first paragraph, for purportedly containing subject matter not described in the specification in such a way as to reasonably convey to one of skill in the art that the inventors had possession of the claimed invention at the time the application was filed. For at least all of the reasons set forth below, withdrawal of this rejection under 35 U.S.C. § 112, first paragraph, is believed to be in order.

These claims have been amended to make clear that the promoter region is obtainable from a gene preferentially regulated in seed embryonic tissue, wherein said gene does not encode phaseolin. As acknowledged by the Examiner, claims drawn to the exclusion of the phaseolin promoter are not new matter. Therefore, withdrawal of this rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Rejection of Claim 35 Under 35 U.S.C. § 102(e)

Claim 35 has been rejected under 35 U.S.C. § 102(e) for purportedly being anticipated by Rogers *et al.* (USP 5,034,322). By the present amendment, claim 35 has been cancelled, without prejudice or disclaimer to the subject matter disclosed therein, in order to expedite prosecution,

thereby rendering this rejection moot. In light of the cancellation of claim 35, Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 102(e).

Rejection of Claims 31-32 and 34-44 Under 35 U.S.C. § 103(a)

Claims 31-32 and 34-44 have been rejected under 35 U.S.C. § 103(a) for purportedly being unpatentable over Zambryski *et al.*, *The EMBO J. 2(12)*:2143-2150 (1983) taken with Rogers *et al.* (USP 5,034,322). By the present amendment, and in order to expedite prosecution, claims 31-32 and 34-44 have been cancelled, without prejudice or disclaimer to the subject matter disclosed therein, thereby rendering this rejection moot. In light of the cancellation of claims 31-32 and 34-44, Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 103(a).

Rejection of Claims 19-27, 62-130 and 133-138 Under 35 U.S.C. § 103(a)

Claims 19-27, 62-130 and 133-138 have been rejected under 35 U.S.C. § 103(a) for purportedly being unpatentable over Hall *et al.* (USP 5,504,200) taken with Sengupta-Gopalan *et al.*, *Proc. Natl. Acad. Sci. 82*:3320-3324 (1985). The Examiner purports that Hall *et al.* discloses constructs for seed-specific expression comprising the phaseolin gene and promoter, and acknowledges that Hall *et al.* does not disclose chimeric gene constructs comprising a phaseolin promoter and a heterologous gene. However, the Examiner purports that Sengupta-Gopalan *et al.* suggest the desirability of tissue specific heterologous gene expression in transformed plants, and therefore if taken with Hall *et al.* would suggest a construct comprising a tissue-specific promoter and a heterologous gene. Applicants respectfully disagree.

Initially, it is noted that the present application claims the benefit of priority of an application filed January 17, 1985 (U.S. Appl. Ser. No. 06/692,605). Sengupta-Gopalan *et al.* was published in May of 1985 (made available to the public on June 3, 1985, as indicated by the date stamp present on this journal at the National Institutes of Health). Therefore, Sengupta-Gopalan *et al.* is not prior art to the present application.

Not withstanding this, and in order to expedite prosecution, Applicants note that even if Sengupta-Gopalan *et al.* was a proper prior art reference, there would be no motivation to combine this reference with Hall *et al.*.

The Examiner has failed to provide the necessary motivation to modify or combine Hall *et al.* with Sengupta-Gopalan *et al.* The Examiner is respectfully reminded that such a motivation must be present to combine the references. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1443 (Fed. Cir. 1991). There is no motivation provided by Hall *et al.*, or in the knowledge generally available to one of skill in the art, to modify the construct discussed by Sengupta-Gopalan *et al.* so that the promoter of the construct is from β-phaseolin and the coding sequence is from a heterologous gene that when expressed provides for expression or modulation of endogenous products.

Furthermore, even if there were a motivation to combine these two references, one would not arrive at the claimed invention because even if taken together these references do not disclose or suggest each of the elements of the claims.

As noted by the Examiner on page 20 of the Official Action mailed September 27, 2001, "Hall *et al.* do not explicitly teach a chimeric gene construct comprising the phaseolin promoter and a heterologous structural gene." Furthermore, Hall *et al.* does not disclose or suggest that the coding sequence used in their plasmids provides for modulation of expression of endogenous products. Therefore, Hall *et al.* does not disclose or suggest a construct comprising, as operably linked components in the direction of transcription, a promoter region obtainable from a gene preferentially regulated in embryonic seed tissue; a DNA sequence of interest, other than the native coding sequence of said gene, that provides for expression or modulation of endogenous products; and a transcription termination region.

Sengupta-Gopalan *et al.* does not solve the deficiencies of Hall *et al.* The Examiner asserts that Sengupta-Gopalan *et al.* discloses a recombinant phage comprising the β-phaseolin gene and the β-phaseolin promoter. Sengupta-Gopalan *et al.* does not disclose or suggest a construct comprising, as operably linked components in the direction of transcription, a promoter region obtainable from a gene preferentially regulated in embryonic seed tissue; a DNA sequence of interest, other than the native coding sequence of said gene, that provides for

expression or modulation of endogenous products; and a transcription termination region. The passages the Examiner relies upon for support of his rejection refer to a construct for expressing in a plant a gene heterologous to the plant, but not heterologous to the promoter (see the first two sentences of the Abstract on page 3320, column 1). Sengupta-Gopalan *et al.* does not disclose or suggest a construct comprising a promoter region from a gene preferentially expressed in seed-embryonic tissue and a DNA sequence heterologous to that promoter. Furthermore, Sengupta-Gopalan *et al.* does not disclose or suggest that their construct can be used to express proteins that modulate the expression of endogenous products of the plant into which the construct is transformed.

Since neither of these references disclose a construct in which the promoter is from a gene preferentially expressed in embryonic seed tissue, and the DNA sequence of interest is from a gene heterologous to the promoter, wherein the DNA sequence encodes a product endogenous to the plant transformed or a product which modifies an endogenous protein in the plant transformed, even if taken together, these references would not disclose or suggest the construct, plants, plant parts, and methods of the claimed invention.

In light of these remarks, Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 103(a).

Rejection of Claims 28-29 Under 35 U.S.C. § 103(a)

Claims 28-29 have been rejected under 35 U.S.C. § 103(a) for purportedly being unpatentable over Hall *et al.* taken with Sengupta-Gopalan *et al.* and further in view of Zambryski *et al.* taken with Pedersen *et al.* For at least all of the reasons set forth below, withdrawal of this rejection under 35 U.S.C. § 103(a) is believed to be in order.

As discussed in more detail above, Hall *et al.* and Sengupta-Gopalan *et al.* even if taken together do not disclose or suggest the construct of the claimed invention. Neither Zambryski *et al.* nor Pedersen *et al.* solve the deficiencies of Hall *et al.* and Sengupta-Gopalan *et al.* with regards to the construct of the claimed invention.

Zambryski *et al.* discloses a construct comprising promoter sequences from the Ti plasmid-specific nopaline synthase gene and coding sequences from nopaline synthase and a foreign gene contained in a pBR-like plasmid (see the paragraph bridging pages 2143 and 2144) and the transformation of tobacco, potato, carrot and petunia with such a construct. However, Zambryski *et al.* does not disclose or even suggest a construct in which the promoter is from a gene preferentially expressed in embryonic seed tissue, and the DNA sequence of interest is from a gene heterologous to the promoter, wherein the DNA sequence encodes a product endogenous to the plant transformed or a product which modifies an endogenous protein in the plant transformed.

Pedersen *et al.* disclosed transformation of soybean with *Agrobacterium tumefaciens* strains C58, T37 and ACH5, and the induction of crown gall tumors. However, Pedersen *et al.* does not disclose or even suggest a construct in which the promoter is from a gene preferentially expressed in embryonic seed tissue, and the DNA sequence of interest is from a gene heterologous to the promoter, wherein the DNA sequence encodes a product endogenous to the plant transformed or a product which modifies an endogenous protein in the plant transformed.

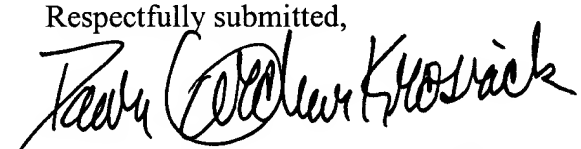
Therefore, even if taken together, these references would not disclose or even suggest a legume plant comprising a plant cell comprising a construct of the claimed invention.

In light of these remarks, Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 103(a).

CONCLUSION

In view of the above, each of the presently pending claims in the application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. The Examiner is invited to contact the undersigned with respect to any unresolved issues remaining in this application.

Respectfully submitted,



David R. Marsh (Reg. No. 41,408)
June E. Cohan (Reg. No. 43,741)
Dawn Gardner Krosnick(Reg. No. 44,118)

Date: August 13, 2003

ARNOLD & PORTER
555 Twelfth Street, N.W.
Washington, D.C. 20004-1206
(202) 942-5000 telephone
(202) 942-5999 facsimile

Marked-Up Version of Claims

19. (Amended) A plant part having an altered phenotype as a result of transcription of a DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of] embryonic seed tissue[, chloroplast containing tissue and fruit tissue]; a DNA sequence of interest other than the native coding sequence of said gene which provides for [modulation of] expression or modulation of an endogenous product[s]; and a transcription termination region, wherein said components are functional in said [plant] embryonic seed tissue, whereby said plant part having an altered phenotype is produced.

21. (Amended) A DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of] embryonic seed tissue[, chloroplast containing tissue, and fruit tissue]; a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product: and a transcription termination region, wherein said components are functional in a plant cell.

22. (Amended) A DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of] embryonic seed tissue[, chloroplast containing tissue, and fruit tissue]; a DNA sequence of interest from a gene which is native to a plant host or a mutant of a gene which is native to a plant host; and a transcription termination region, wherein said components are functional in said plant host.

81. (Amended) A method for obtaining a plant having a regulatable phenotype, said method comprising;

transforming a host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue]; a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product, and a transcription termination region, wherein said components are functional in a plant cell;

whereby said DNA construct becomes integrated into a genome of said plant

regenerating a plant from said transformed plant cell, and

growing said plant under conditions whereby said DNA sequence of interest is expressed and a plant having said regulatable phenotype is obtained.

82. (Amended) A method for altering the phenotype of a plant tissue of interest as distinct from other plant tissue, said method comprising:

growing a plant, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue], a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for [modulation of] expression <u>or modulation</u> of <u>an</u> endogenous product[s], and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcriptional initiation region and a plant having an altered phenotype is obtained.

85. (Amended) A method for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest as distinct from other plant tissue, said method comprising:

transforming under genomic integration conditions, a host plant cell with a DNA construct comprising in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue], a DNA sequence of interest other than the native coding sequence of said gene which provides for [modulation of] expression or modulation of an endogenous product[s], and a transcriptional termination region, whereby said DNA construct becomes integrated into the genome of said plant cell;

regenerating a plant from said transformed host cell; and

growing said plant to produce a plant tissue of interest having a modified genotype.

89. (Amended) A method for modifying transcription in plant tissue of interest as distinct from other plant tissue, said method comprising:

growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue], a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for [modulation of] expression or modulation of an endogenous product[s], and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcription initiation region specifically regulated in said plant tissue of interest.

92. (Twice Amended) A method to selectively express a heterologous DNA sequence of interest in a plant tissue of interest, said method comprising:

growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of

transcription, a transcriptional initiation region specifically regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue], a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for [modulation of] expression or modulation of an endogenous product[s], and a transcriptional termination region downstream of said DNA sequence of interest, whereby said DNA sequence of interest is expressed under control of said transcriptional initiation region specifically regulated in said [plant tissue of interest] embryonic seed tissue.

101. (Amended) A method for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest as distinct from other plant tissue, said method comprising:

transforming under genomic integration conditions, a host plant cell with a DNA construct comprising in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue [and fruit tissue], a DNA sequence of interest [other than the native coding sequence of said gene] which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence of interest is not the native coding sequence of said gene, and: a transcriptional termination region, whereby said DNA construct becomes integrated into the genome of said plant cell;

regenerating a plant from said transformed host cell; and

growing said plant to produce a plant tissue of interest having a modified genotype.

105. (Amended) A method for modifying transcription in plant tissue of interest as distinct from other plant tissue, said method comprising

growing a plant capable of developing plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in [a plant tissue selected

from the group consisting of chloroplast containing tissue,] embryonic seed tissue [and fruit tissue], a DNA sequence of interest [other than the coding sequence native to said transcriptional initiation region] which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence of interest is not the coding sequence native to said transcriptional initiation region, and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcription initiation region specifically regulated in said plant tissue of interest.

108. (Amended) A method to selectively express a heterologous DNA sequence of interest in a plant tissue of interest as distinct from other plant tissue, said method comprising: growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue, and a translational initiation region], a DNA sequence of interest which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence is not the coding sequence native to said transcriptional initiation region, a transcriptional termination region downstream of said DNA sequence of interest, whereby said DNA sequence of interest is expressed under control of said transcriptional [and translational] initiation region specifically regulated in said plant tissue of interest.

129. (Twice Amended) A method for obtaining a plant having a regulatable phenotype, said method comprising:

transforming a host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue of interest] seed embryonic tissue and wherein said gene does not encode phaseolin, a DNA sequence of interest other than the native coding

sequence of said gene [that is not a phaseolin coding sequence], and a transcription termination region, wherein said components are functional in a plant cell,

whereby said DNA construct becomes integrated into a genome of said plant cell;

regenerating a plant from said transformed plant cell, and

growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.

130. (Twice Amended) A method for altering the phenotype of a plant tissue of interest, said method comprising:

growing a plant, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue of interest] <u>embryonic seed tissue and wherein said gene does not encode phaseolin</u>, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region [that is not a phaseolin coding sequence], and a transcriptional termination region;

whereby said DNA sequence of interest is transcribed under transcriptional control of said transcriptional initiation region, and a plant having an altered phenotype is obtained.

136. (Amended) A method to selectively express a heterologous DNA sequence of interest in a dicotyledonous plant tissue of interest as distinct from other dicotyledonous plant tissue, said method comprising:

growing a dicotyledonous plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue[and fruit tissue], a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for [modulation of] expression <u>or modulation</u> of <u>an</u> endogenous product[s], and a transcriptional termination region downstream of said DNA

sequence of interest, whereby said DNA sequence of interest is expressed under control of said transcriptional initiation region specifically regulated in said plant tissue of interest.

137. (Amended) A method for obtaining a dicotyledonous plant having a regulatable phenotype, said method comprising:

transforming a dicotyledonous host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably liked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue selected from the group consisting of chloroplast containing tissue,] embryonic seed tissue [and fruit tissue], a DNA sequence of interest other than the native coding sequence of said gene which provides for at least one of increased capability of protein storage, improved nutrient source, enhanced response to light, enhanced dehydration resistance, enhanced herbicide resistance, enhanced resistance to viruses, insects or fungi, and a transcription termination region, wherein said components are functional in a plant cell, whereby said DNA construct becomes integrated into a genome of said plant cell;

regenerating a plant from said transformed plant cell, and growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.

138. (Amended) A method for obtaining a dicotyledonous plant having a regulatable phenotype, said method comprising:

transforming a dicotyledonous host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in [a plant tissue of interest] <u>seed embryonic tissue and wherein said gene does not encode phaseolin</u>, a DNA sequence of interest other than the native coding sequence of said gene [that is not a phaseolin coding sequence], and a transcription termination region, wherein said components are functional in a plant cell,

whereby said DNA construct becomes integrated into a genome of said plant cell;

regenerating a plant from said transformed plant cell, and

growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.